

## Claims

What is claimed is:

1. A method for handling errors in adapters used for communication in data processing network having at least two nodes connected through a switch, said error handling method comprising the steps of:

detecting a nonpermanent error condition, within an adapter connected to one of said nodes, from which recovery is possible from within the node connected to said adapter ;

suspending communications from within the node with the adapter affected by said error condition;

disabling communication between said affected adapter and said switch so as to provide an indication to at least one other node in said network that communication with said affected adapter is at least temporarily suspended so as to effectively cause suspension of, but not termination of, applications running on said at least one other node in said network;

performing recovery operations, at said affected node, to restore operation of said affected adapter, based on said detected error condition, said recovery including enablement of said disabled communication ; and

resuming communication with said affected adapter upon enablement of said disabled communication.

2. A method for handling adapter errors in a multinode data processing network in which node-to-node communication is at least partially handled by adapters connected to said nodes, said adapters operating to pass messages from said nodes through a switch which links the nodes in said network, said error handling method comprising the steps of:

detecting a nonpermanent error condition, within an adapter connected to one of said nodes, from which recovery is possible from within the node connected to said error affected adapter;

suspending communication from the node connected to said affected adapter;

disabling communication between said affected adapter and said switch so as to provide an indication to at least one other node in said network that communication with said affected adapter is at least temporarily suspended, so as to effectively cause suspension of, but not termination of, applications running on said at least one other node in said network ;

performing recovery operations, at said affected node, to restore operation of said affected adapter, based on said detected error condition , said recovery including enablement of said disabled communication;

terminating said running applications on nonaffected nodes in said network upon a determination that reestablishment of communication with said affected adapter is taking too long; and

otherwise maintaining said running applications and restoring communication with said affected node after performance of said recovery operations.

3. The method of claim 2 in which at least one of said applications is running in a window environment.
4. The method of claim 2 in which said suspending step includes fencing at least one communication port via which said adapter is connected to said switch.
5. The method of claim 2 in which said suspending step further includes halting direct memory access between said affected adapter and the node to which it is connected.
6. The method of claim 2 in which recovery operations includes logging operations which are carried for said adapter to facilitate error analysis.